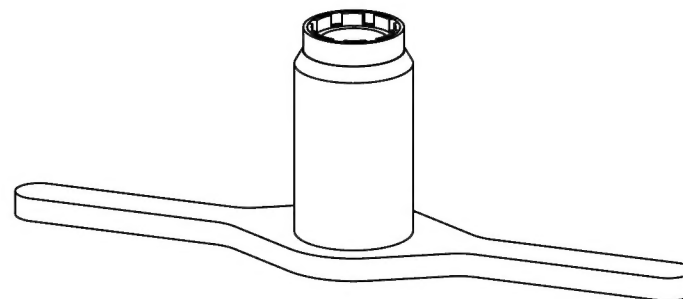
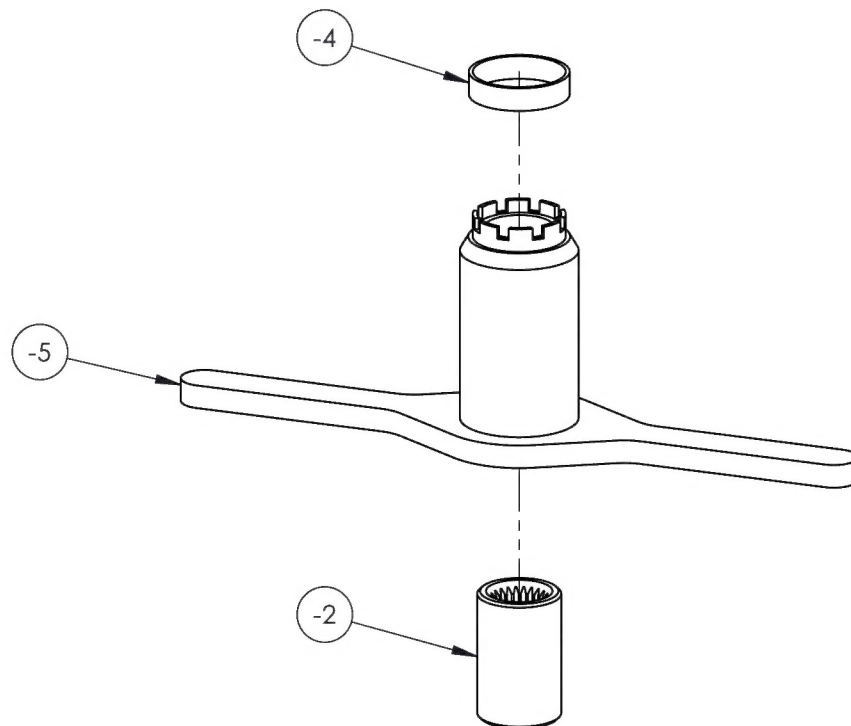


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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
1		CHANGED MATERIAL FROM 4140 OR 41L40 TO 4140 Q&T, ALSO CHANGED RC FROM 30-35.	2/27/2009	WP	DW
1A		CH'D TITLEBLOCK & REVISION BLOCK. CH'D -1 & -2 FROM 4140 TO 4140 Q&T PER DW.	12/7/2009	RJC	RW
2		DELETED -3 Ø.250 X2 FIXTURE HOLES PER G.E.	6/12/2012	RJC	GE
3	17-0056	UPDATED TO NEW STANDARDS. ADDED OEM REF NOTE. -1 CH'D MAT'L WAS 4140 Q&T IS 4140/4142. CH'D DIM WAS Ø1.937 P.F. -4 IS Ø1.9364-1.9370 (P.F. -.4). ADDED DIMS .50 Ø2.427-2.447 (S.F. -.3). ADDED NOTE RC 30-35 HEAT TREAT BEFORE MACHINING. -2 CH'D DIM WAS .75 SQ. IS 2X .758/.753. ADDED DIMS 2X 1.005 MIN. Ø1.755/1.750 (S.F. -.1), 90°. DELETED DIMS R1.0, Ø1.105-1.100. CH'D MAT'L WAS 4140 Q&T IS 4140/4142. ADDED HEAT TREAT RC 30-35 AFTER MACHINING. ADDED FINISH SPEC QMSI-6.2.2, B.O. REV D. ADDED TIMING NOTE. -3 CH'D MAT'L FROM 1018 TO A36/1018/1020 HR. CH'D DIMS WAS 2X R.50 IS 2X FULL R, WAS Ø2.500 IS 2.452-2.462 (S.F. -.1). ADDED DIM 2X 1.00. -4 CH'D MAT'L FROM 1018 TO 1018/1020 CR. ADDED FINISH BLACK OXIDE QMSI-6.2.2, B.O. REV D. CH'D DIM WAS Ø1.937 P.F. -1 IS Ø1.9346-1.9356 (P.F. -.1). -5 ADDED FINISH SPEC QMSI-6.2.2, B.O. REV D.	6/16/2017	DPD	JAG



#### NOTES:

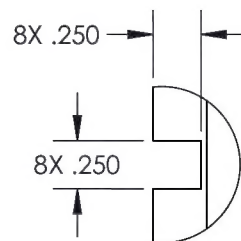
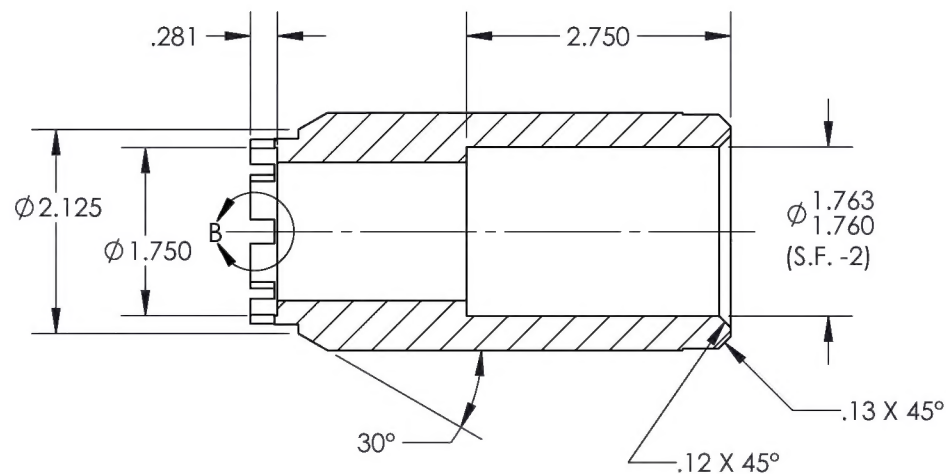
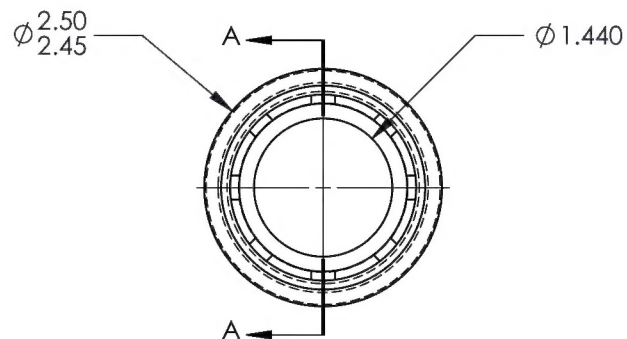
1. USED TO REMOVE & REPLACE BEARING LOCK NUT #SL6IN-8F FROM ASSEMBLED TRANSMISSION FOR FIELD SERVICE OF OIL SEAL #369A55199 AND SHROUD MOUNT #369A5104.
2. REF. MD T/N: 369A9966.

<b>DART AEROSPACE</b>																							
TITLE <b>BARREL WRENCH SET</b>																							
DWG NO. <b>RBA9966</b>	REV <b>3</b>																						
<table border="1"> <tr> <td>MAT'L</td> <td>UNLESS OTHERWISE SPECIFIED</td> </tr> <tr> <td>HEAT TREAT</td> <td>DIMENSIONS ARE IN INCHES</td> </tr> <tr> <td>FINISH</td> <td>.XXX ± .005 FRACTIONS ± 1/8</td> </tr> <tr> <td>SPEC</td> <td>.XX ± .01 ANGLES ± 5°</td> </tr> <tr> <td>DRAWN BY: COLE</td> <td>.X ± .1 SURFACES = 125°</td> </tr> <tr> <td>CHECKED: RJC 06/16/2017</td> <td>1. BREAK ALL SHARP EDGES</td> </tr> <tr> <td>OPPS APPR: AA 06/20/2017</td> <td>.015 x 45° OR .015R</td> </tr> <tr> <td>QA APPR: JL 06/28/2017</td> <td>2. DIMENSIONAL LIMITS APPLY AFTER PLATING</td> </tr> <tr> <td>APPROVED: JAG 07/03/2017</td> <td>3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009</td> </tr> <tr> <td>SCALE 1:4</td> <td>DATE 6/13/2003</td> </tr> <tr> <td colspan="2">SHEET 1 OF 6</td> </tr> </table>		MAT'L	UNLESS OTHERWISE SPECIFIED	HEAT TREAT	DIMENSIONS ARE IN INCHES	FINISH	.XXX ± .005 FRACTIONS ± 1/8	SPEC	.XX ± .01 ANGLES ± 5°	DRAWN BY: COLE	.X ± .1 SURFACES = 125°	CHECKED: RJC 06/16/2017	1. BREAK ALL SHARP EDGES	OPPS APPR: AA 06/20/2017	.015 x 45° OR .015R	QA APPR: JL 06/28/2017	2. DIMENSIONAL LIMITS APPLY AFTER PLATING	APPROVED: JAG 07/03/2017	3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009	SCALE 1:4	DATE 6/13/2003	SHEET 1 OF 6	
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OPPS APPR: AA 06/20/2017	.015 x 45° OR .015R																						
QA APPR: JL 06/28/2017	2. DIMENSIONAL LIMITS APPLY AFTER PLATING																						
APPROVED: JAG 07/03/2017	3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009																						
SCALE 1:4	DATE 6/13/2003																						
SHEET 1 OF 6																							

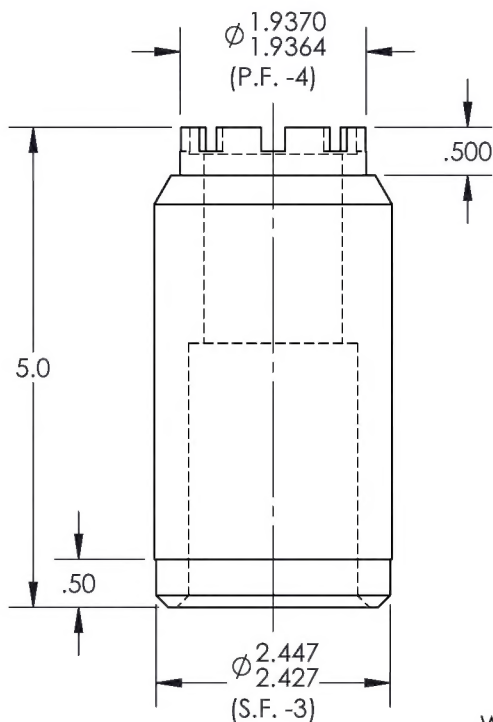
ASSY QTY	ASSY QTY	B/O	Part #	UNIT QTY	Description	Material	B/O INFORMATION OR SPECIFICATIONS	PG.
	1		-1		WRENCH, NUT	4140/4142		2
			-2	1	WRENCH SPLINE	4140/4142		3
	1		-3		HANDLE	A36/1018/1020 HR		4
			-4	1	SLEEVE	1018/1020 CR		5
	X		-5	1	WELDMENT, BARREL WRENCH			6
	ASSY -5							

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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
1		CHANGED MATERIAL FROM 4140 OR 41L40 TO 4140 Q&T.	2/27/2009	WP	DW
3	17-0056	-1 CH'D MAT'L WAS 4140 Q&T IS 4140/4142. CH'D DIM WAS Ø1.937 PF -4 IS Ø1.9364-1.9370 (P.F. -4). ADDED DIMS .50 Ø2.427-2.447 (S.F. -3). ADDED NOTE RC 30-35 HEAT TREAT BEFORE MACHINING.	6/16/2017	DPD	JAG



DETAIL B  
SCALE 1 : 1



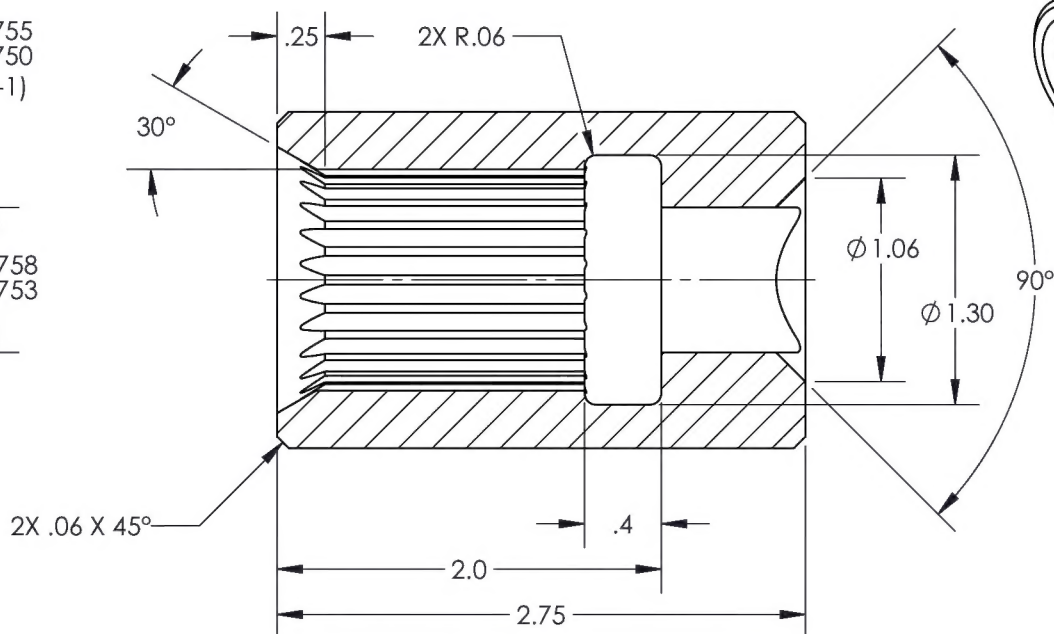
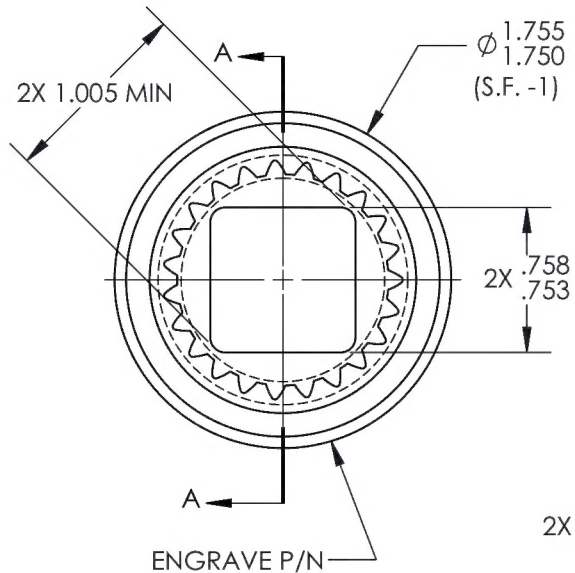
(-1)  
WRENCH, NUT

NOTE:  
RC 30-35 HEAT TREAT BEFORE MACHINING.

<b>DART AEROSPACE</b>																											
TITLE <b>BARREL WRENCH SET</b>																											
DWG NO. <b>RBA9966-1</b>	REV <b>3</b>																										
<table border="1"> <tr> <td>MAT'L 4140/4142</td> <td>UNLESS OTHERWISE SPECIFIED</td> </tr> <tr> <td>HEAT TREAT SEE NOTE</td> <td>DIMENSIONS ARE IN INCHES</td> </tr> <tr> <td>FINISH SEE -5</td> <td>.XXX ± .005 FRACTIONS ± 1/8</td> </tr> <tr> <td>SPEC</td> <td>.XX ± .01 ANGLES ± 5°</td> </tr> <tr> <td></td> <td>.X ± .1 SURFACES = 125/✓</td> </tr> <tr> <td>DRAWN BY: COLE</td> <td>1. BREAK ALL SHARP EDGES</td> </tr> <tr> <td>CHECKED: RJC 06/16/2017</td> <td>.015 x 45° OR .015R</td> </tr> <tr> <td>OPPS APPR: AA 06/20/2017</td> <td>2. DIMENSIONAL LIMITS APPLY</td> </tr> <tr> <td>QA APPR: JL 06/28/2017</td> <td>AFTER PLATING</td> </tr> <tr> <td>APPROVED: JAG 07/03/2017</td> <td>3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009</td> </tr> <tr> <td>SCALE 1:2</td> <td>DATE 6/13/2003</td> </tr> <tr> <td colspan="2" style="text-align: center;">USED ON MODEL MD</td> </tr> <tr> <td colspan="2" style="text-align: center;">SHEET 2 OF 6</td> </tr> </table>		MAT'L 4140/4142	UNLESS OTHERWISE SPECIFIED	HEAT TREAT SEE NOTE	DIMENSIONS ARE IN INCHES	FINISH SEE -5	.XXX ± .005 FRACTIONS ± 1/8	SPEC	.XX ± .01 ANGLES ± 5°		.X ± .1 SURFACES = 125/✓	DRAWN BY: COLE	1. BREAK ALL SHARP EDGES	CHECKED: RJC 06/16/2017	.015 x 45° OR .015R	OPPS APPR: AA 06/20/2017	2. DIMENSIONAL LIMITS APPLY	QA APPR: JL 06/28/2017	AFTER PLATING	APPROVED: JAG 07/03/2017	3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009	SCALE 1:2	DATE 6/13/2003	USED ON MODEL MD		SHEET 2 OF 6	
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CHECKED: RJC 06/16/2017	.015 x 45° OR .015R																										
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USED ON MODEL MD																											
SHEET 2 OF 6																											

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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
1		-2 CH'D MATERIAAL FROM 4140 OR 41L40 TO 4140 Q&T.	2/27/2009	WP	DW
3	17-0056	-2 CH'D DIM WAS .75 SQ. IS 2X .758/.753. ADDED DIMS 2X 1.005 MIN, Ø1.755/1.750 (S.F. -1), 90°. DELETED DIMS R1.0, Ø1.105-1.100. CH'D MAT'L WAS 4140 Q&T IS 4140/4142. ADDED HEAT TREAT RC 30-35 AFTER MACHINING. ADDED FINISH SPEC QMSI-6.2.2, B.O. REV D. ADDED TIMING NOTE.	6/15/2017	RJC	JAG



SECTION A-A

NOTES:

1. HEAT TREAT RC 30-35 BEFORE MACHINING.
2. TIMING OF FEATURES NOT CRITICAL.

INTERNAL SPLINE DATA

NUMBER OF TEETH	23
DIAMETRAL PITCH	20/40
PITCH DIAMETER	1.150
PRESSURE ANGLE	30°
MINOR DIAMETER	1.100 - 1.105
DIAMETER OVER Ø .0864 PINS	1.027 - 1.030

(2)

WRENCH SPLINE



TITLE

BARREL WRENCH SET

DWG NO.

RBA9966-2

REV  
3

MAT'L 4140/4142

HEAT TREAT SEE NOTE

FINISH BLACK OXIDE

SPEC QMSI-6.2.2, B.O. REV D

DRAWN BY: COLE

CHECKED: RJC 06/16/2017

OPPS APPR: AA 06/20/2017

QA APPR: JL 06/28/2017

APPROVED: JAG 07/03/2017

SCALE 1:1

DATE 6/13/2003

UNLESS OTHERWISE SPECIFIED

DIMENSIONS ARE IN INCHES

.XXX ± .005 FRACTIONS ± 1/8

.XX ± .01 ANGLES ± 5°

.X ± .1 SURFACES = 125/✓

1. BREAK ALL SHARP EDGES

.015 x 45° OR .015R

2. DIMENSIONAL LIMITS APPLY

AFTER PLATING

3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009

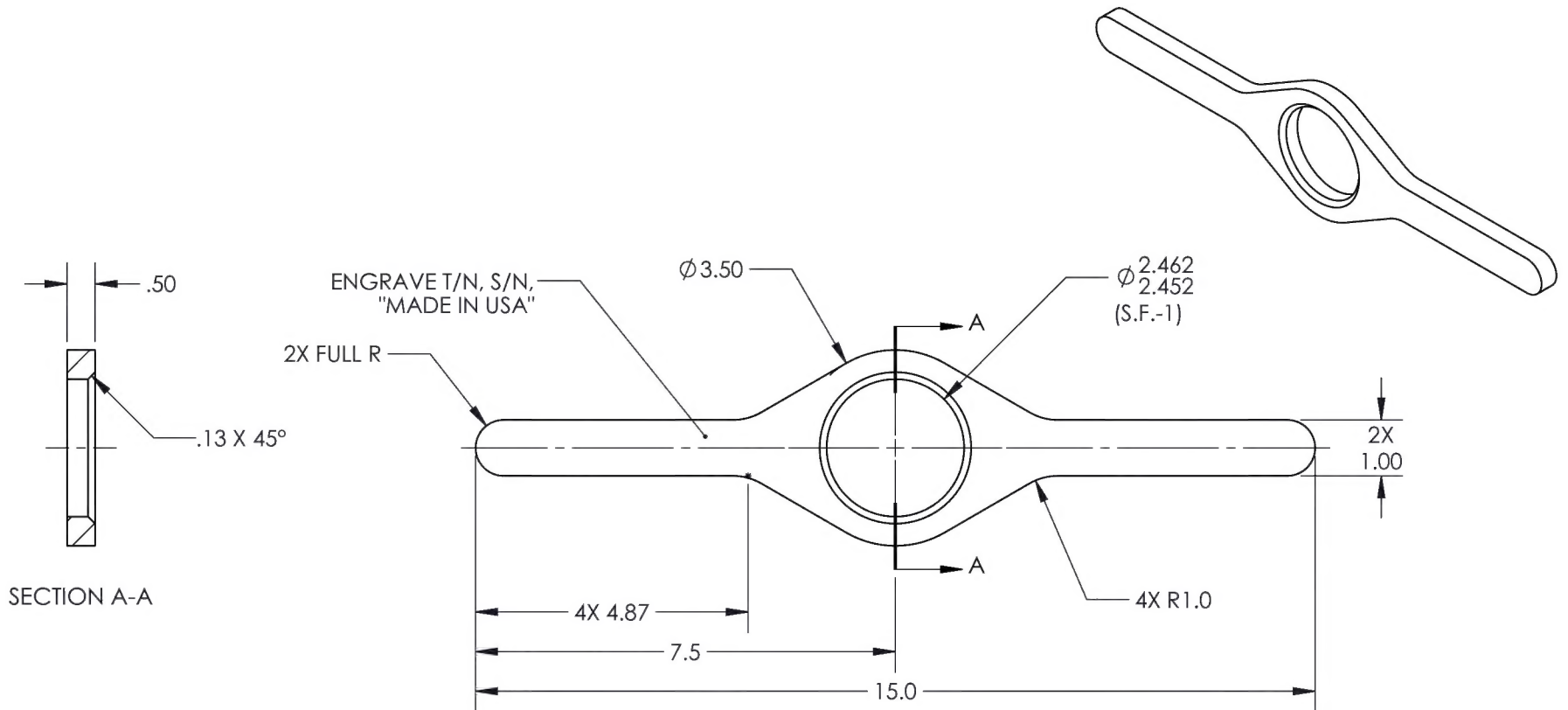
USED ON MODEL

MD

SHEET 3 OF 6

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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
2		DELETED -3 Ø.250 X2 FIXTURE HOLES PER G.E.	6/12/2012	RJC	GE
3	17-0056	-3 CH'D MAT'L FROM 1018 TO A36/1018/1020 HR. CH'D DIMS WAS 2X R.50 IS 2X FULL R, WAS Ø2.500 IS 2.452-2.462 [S.F. -1]. ADDED DIM 2X 1.00.	6/16/2017	DPD	JAG



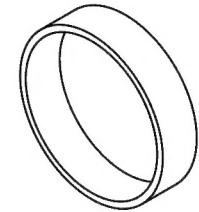
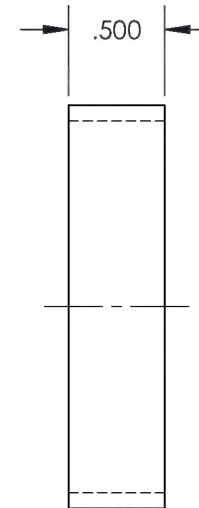
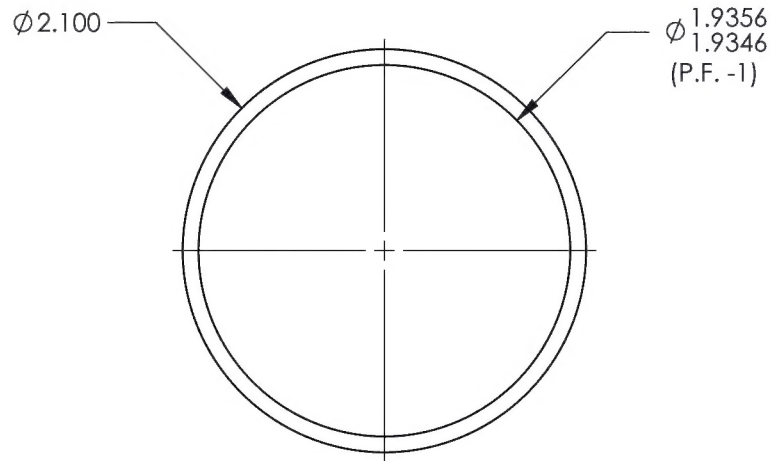
SECTION A-A

(-3)  
HANDLE

<b>DART AEROSPACE</b>	
TITLE <b>BARREL WRENCH SET</b>	
DWG NO. <b>RBA9966-3</b>	REV <b>3</b>
MAT'L A36/1018/1020 HR	UNLESS OTHERWISE SPECIFIED
HEAT TREAT	DIMENSIONS ARE IN INCHES
FINISH SEE -5	.XXX ± .005 FRACTIONS ± 1/8
SPEC	.XX ± .01 ANGLES ± .5°
	.X ± .1 SURFACES = 125° ✓
DRAWN BY: COLE	1. BREAK ALL SHARP EDGES
CHECKED: RJC 06/16/2017	.015 x 45° OR .015R
OPPS APPR: AA 06/20/2017	2. DIMENSIONAL LIMITS APPLY
QA APPR: JL 06/28/2017	AFTER PLATING
APPROVED: JAG 07/03/2017	3. INTERPRET DIM AND TOL PER
	ASME Y14.5M-2009
SCALE 1:3	DATE 6/13/2003
	USED ON MODEL
	MD
	SHEET 4 OF 6

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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
3	17-0056	-4 CH'D MAT'L FROM 1018 TO 1018/1020 CR, ADDED FINISH BLACK OXIDE QMSI-6.2.2, B.O. REV D. CH'D DIM WAS Ø1.937 P.F. -1 IS Ø1.9346-1.9356 (P.F. -1).	6/16/2017	DPD	JAG



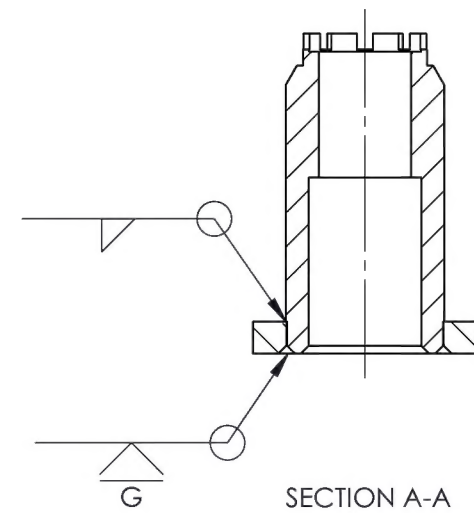
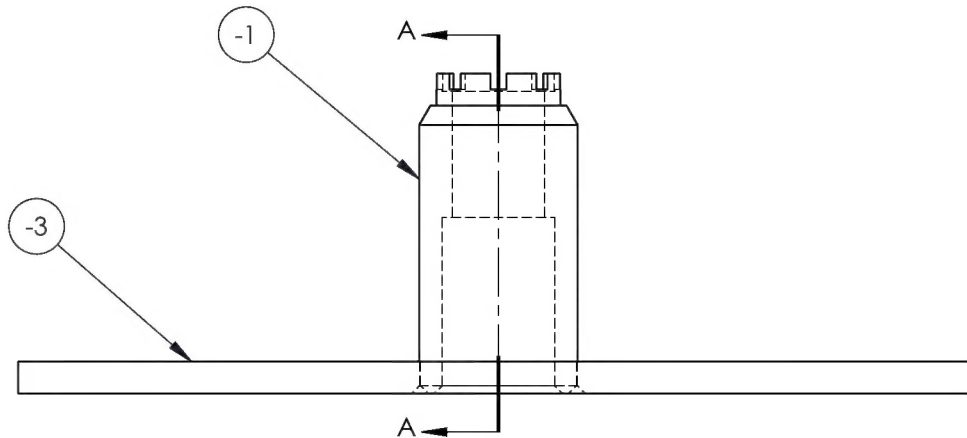
(-4)  
SLEEVE

<b>DART AEROSPACE</b>	
TITLE <b>BARREL WRENCH SET</b>	
DWG NO. <b>RBA9966-4</b>	REV <b>3</b>
MAT'L 1018/1020 CR	UNLESS OTHERWISE SPECIFIED
HEAT TREAT	DIMENSIONS ARE IN INCHES
FINISH BLACK OXIDE	.XXX ± .005 FRACTIONS ± 1/8
SPEC QMSI-6.2.2, B.O. REV D	.XX ± .01 ANGLES ± 5°
DRAWN BY: COLE	.X ± .1 SURFACES = 125° ✓
CHECKED: RJC 06/16/2017	1. BREAK ALL SHARP EDGES
OPPS APPR: AA 06/20/2017	.015 x 45° OR .015R
QA APPR: JL 06/28/2017	2. DIMENSIONAL LIMITS APPLY
APPROVED: JAG 07/03/2017	AFTER PLATING
SCALE 1:1	3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009
DATE 6/13/2003	USED ON MODEL
SHEET 5 OF 6	MD



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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
3		-5 ADDED FINISH SPEC QMSI-6.2.2, B.O. REV D.	6/16/2017	DPD	JAG



(5)  
WELDMENT, BARREL WRENCH

<b>DART AEROSPACE</b>	
TITLE <b>BARREL WRENCH SET</b>	
DWG NO. <b>RBA9966-5</b>	REV <b>3</b>
MAT'L <b>STEEL</b>	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
HEAT TREAT <b>BLACK OXIDE</b>	.XXX ± .005 FRACTIONS ± 1/8
FINISH <b>BLACK OXIDE</b>	.XX ± .01 ANGLES ± 5°
SPEC <b>QMSI-6.2.2, B.O. REV D</b>	.X ± .1 SURFACES = 125°
DRAWN BY: <b>COLE</b>	1. BREAK ALL SHARP EDGES .015 x 45° OR .015R
CHECKED: <b>RJC 06/16/2017</b>	2. DIMENSIONAL LIMITS APPLY AFTER PLATING
OPPS APPR: <b>AA 06/20/2017</b>	3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009
QA APPR: <b>JL 06/28/2017</b>	USED ON MODEL
APPROVED: <b>JAG 07/03/2017</b>	MD
SCALE <b>1:3</b>	DATE <b>6/13/2003</b>
SHEET 6 OF 6	